

We claim:

1. A method for identifying compounds that modulate binding of CK β 8-1 to FPRL-1 receptor, said method comprising:
 - providing cells expressing FPRL-1 receptor or functional fragment or variant thereof;
 - contacting said cells with CK β 8-1 or a functional fragment or variant thereof, in the presence or absence of a compound; and
 - measuring a signal indicative of receptor activation;where an alteration to said signal in the presence of a compound identifies said compound as a compound that modulates binding of CK β 8-1 to FPRL-1 receptor.
2. The method of claim 1, wherein the FPRL-1 receptor is expressed from a heterologous FPRL-1 receptor gene.
3. The method of claim 1, wherein the FPRL-1 receptor is mammalian.
4. The method of claim 3, wherein the FPRL-1 receptor is human.
5. The method of claim 1, wherein said cells are mammalian cells.
6. The method of claim 5, wherein the cells are human cells.
7. The method of claim 1, wherein said measuring is performed using a FLIPR assay.
8. The method of claim 1, wherein the signal measured is modulation of intracellular phospholipase C activity, intracellular adenylyl cyclase activity or intracellular calcium concentration.
9. The method of claim 1, wherein the CK β 8-1 is CK β 8-1 (aa46-137).
10. A method for identifying compounds that modulate the binding of CK β 8-1 to the FPRL-1 receptor, said method comprising:
 - providing the FPRL-1 receptor or functional fragment or variant thereof;

contacting the FPRL-1 receptor or functional fragment or variant thereof, with CK β 8-1 or functional fragment or variant thereof in the presence or absence of a compound; and measuring the amount of CK β 8-1 or functional fragment or variant thereof that forms a complex with the FPRL-1 receptor or functional fragment or variant thereof; where an alteration to the amount of said complex formed in the presence of said compound identifies said compound as a compound that modulates binding of CK β 8-1 to the FPRL-1 receptor.

11. The method of claim 10, wherein FPRL-1 receptor/CK β 8-1 complexes are isolated prior to measuring the amount of CK β 8-1 in said complexes.
12. The method of claim 11, wherein the CK β 8-1 is detectably labeled.
13. The method of claim 12, wherein the CK β 8-1 is radiolabeled, fluorescently labeled, or chemiluminescently labeled.
14. The method of claim 13, wherein the CK β 8-1 is radiolabeled.
15. The method of claim 10, wherein CK β 8-1 is bound to an enzyme, and measuring is carried out by enzyme-linked immunosorbent assay (ELISA).
16. The method of claim 10, wherein the FPRL-1 receptor, or functional fragment or variant thereof, is human.
17. The method of claim 10, wherein the CK β 8-1 is CK β 8-1 (aa46-137).
18. The method of claim 10, wherein the FPRL-1 receptor, or functional fragment or variant thereof, is provided as cells expressing the FPRL-1 receptor or functional fragment or variant thereof, or is provided as membranes prepared from said cells.
19. The method of claim 18, wherein the FPRL-1 receptor, or functional fragment or variant thereof, is expressed from a heterologous FPRL-1 receptor gene.

20. The method of claim 18, wherein said cells are mammalian cells.
21. The method of claim 20, wherein the cells are human cells.
22. A method of screening for a FPRL-1 receptor agonist or antagonist comprising measuring a cell stimulating activity through a FPRL-1 receptor determined from the following steps a) and b);
- a) contacting a compound with a cell expressing a FPRL-1 receptor or functional fragment or variant thereof (test screen), and comparing the results to a control screen wherein the cell does not express the FPRL-1 receptor or functional fragment or variant thereof, wherein said compound having cell stimulating activity in the test screen but not the control screen indicates that the test compound is a FPRL-1 receptor agonist,
- b) contacting CK β 8-1 or functional fragment or variant thereof and a test compound with a cell expressing a FPRL-1 receptor or functional fragment or variant thereof (test screen), and comparing the results to a control screen wherein the cell does not express the FPRL-1 receptor or functional fragment or variant thereof, where a decrease in cell stimulating activity by CK β 8-1 or functional fragment or variant thereof in the test screen but not the control screen indicates that the test compound is a FPRL-1 receptor antagonist.
23. The method of claim 22, wherein the CK β 8-1 is CK β 8-1 (aa46-137).
24. The method of claim 23, wherein the cell stimulating activity is intracellular phospholipase C activity, intracellular adenylyl cyclase activity, or intracellular calcium concentration.
25. A method of screening for compounds that modulate binding of CK β 8-1 to FPRL-1 receptor, comprising comparing the amount of CK β 8-1 or functional fragment or variant thereof bound to FPRL-1 receptor or functional fragment or variant thereof in steps a) and b):
- a) contacting CK β 8-1 or functional fragment or variant thereof with the FPRL-1 receptor or functional fragment or variant thereof;
- b) contacting CK β 8-1 or functional fragment or variant thereof and a test compound with the FPRL-1 receptor or functional fragment or variant thereof;

where an alteration in the amount of CK β 8-1 or functional fragment or variant thereof bound to FPRL-1 receptor or functional fragment or variant thereof in step b) indicates that the test compound modulates binding of CK β 8-1 to the FPRL-1 receptor.

26. The method of claim 25, wherein the CK β 8-1 is CK β 8-1 (aa46-137).

27. A method of screening for compounds that inhibit binding of CK β 8-1 to FPRL-1 receptor, comprising comparing the amount of CK β 8-1 or functional fragment or variant thereof bound to FPRL-1 receptor or functional fragment or variant thereof in steps a) and b):

- a) contacting CK β 8-1 or functional fragment or variant thereof with the FPRL-1 receptor or functional fragment or variant thereof;
- b) contacting CK β 8-1 or functional fragment or variant thereof and a test compound with the FPRL-1 receptor or functional fragment or variant thereof;

where a decrease in CK β 8-1 or functional fragment or variant thereof binding in step b) indicates that the test compound inhibits binding of CK β 8-1 to the FPRL-1 receptor.

28. The method of claim 27, wherein the CK β 8-1 is CK β 8-1 (aa46-137).

29. A method of identifying a compound that modulates binding of CK β 8-1 to FPRL-1 receptor, comprising contacting FPRL-1 receptor or functional fragment or variant thereof with CK β 8-1 or functional fragment or variant thereof in the presence or absence of a test compound, and comparing the amount of binding between CK β 8-1 or functional fragment or variant thereof and the FPRL-1 receptor or functional fragment or variant thereof in the presence or absence of the test compound, where an alteration in the amount of binding between CK β 8-1 or functional fragment or variant thereof and the FPRL-1 receptor or functional fragment or variant thereof in the presence of the test compound indicates that the test compound modulates binding between CK β 8-1 and the FPRL-1 receptor.

30. The method of claim 29, wherein the CK β 8-1 is CK β 8-1 (aa46-137).

31. A method of identifying a compound that binds FPRL-1 receptor, comprising incubating a cell expressing FPRL-1 receptor or functional fragment or variant thereof with

CK β 8-1 or functional fragment or variant thereof in the presence or absence of a compound, and detecting displacement of CK β 8-1 or functional fragment or variant thereof binding to the FPRL-1 receptor or functional fragment or variant thereof in the presence of the compound, where displacement of said binding is indicative of a compound that binds the FPRL-1 receptor.

32. The method of claim 31, wherein the CK β 8-1 is CK β 8-1 (aa46-137).

33. A method of determining if a test compound is an agonist, antagonist or inverse agonist of CK β 8-1 comprising

- a) incubating a cell expressing FPRL-1 or functional fragment or variant thereof with the test compound;
- b) measuring a signal indicative of receptor activation; and
- c) comparing the measurement in b) with a second measurement of a signal indicative of receptor activation obtained from incubations performed in the absence of the test compound, where the test compound is an agonist of CK β 8-1 if the signal indicative of receptor activation is higher in the presence of the test compound than in its absence, and wherein the test compound is an antagonist of CK β 8-1 if the signal indicative of receptor activation is lower in the presence of the test compound than in its absence.